



BRUHAT BANGALORE MAHANAGARA PALIKE

YELAHANKA ZONE

BYATARAYANAPURA DIVISION

KODIGEHALLI SUB DIVISOIN

**Name of the Work : Improvements of roads and Drains at
Devinagara, Muneshwara Block, Amco
layout and Kodigehalli in ward no 8
Area, Kodigehalli sub Division.**

Estimate Cost : 50.00 Lakhs

ತಾಂತ್ರಿಕ ವರದಿ

ವಿಷಯ: Improvements of roads and Drains at Devinagara, Muneshwara Block, Amco layout and Kodigehalli in ward no 8 Area, Kodigehalli sub Division. ಕಾಮಗಾರಿಯ ಅಂದಾಜು ಪಟ್ಟಿಗೆ

ಅನುಮೋದನೆಗೆ ಸಲ್ಲಿಸುವ ಬಗ್ಗೆ.

ಉಲ್ಲೇಖ: 1. ಮಾನ್ಯ ಸದಸ್ಯರು, ವಾರ್ಡ್ ನಂ. 08, ಬೃ.ಬೆಂ.ಮ.ಪಾ ರವರ ಪತ್ರ ಸಂ:336/2012-13

2. ಪೂಜ್ಯ ಮಹಾಪೌರರು, ಬೃಹತ್ ಬೆಂಗಳೂರು ಮಹಾನಗರ ಪಾಲಿಕೆ ರವರ ಪತ್ರ ಸಂಖ್ಯೆ: ಎಂ.ಪಿ.ಎಸ್/ಕಾಅ/87/2012-13 ದಿನಾಂಕ: 28.01.2013

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ಕೊಡಿಗೆಹಳ್ಳಿ ಉಪವಿಭಾಗದ ವಾರ್ಡ್ ನಂ. 08ರ ವ್ಯಾಪ್ತಿಯಲ್ಲಿನ ದೇವಿನಗರ, ಸಿ.ಪಿ.ಬಡಾವಣೆ ಮತ್ತು ಮುನೇಶ್ವರ ಬ್ಲಾಕ್ ಪ್ರದೇಶದಲ್ಲಿನ ಮುಖ್ಯರಸ್ತೆ ಮತ್ತು ಅಡ್ಡರಸ್ತೆಗಳು ಮಣ್ಣು ರಸ್ತೆಗಳಾಗಿದ್ದು, ಇತ್ತೀಚಿನ ದಿನಗಳಲ್ಲಿ ಬೆಂಗಳೂರು ಜಲಮಂಡಳಿ ರವರಿಂದ ಒಳಚರಂಡಿ ಕೊಳವೆ ಸಾಲುಗಳನ್ನು ಅಳವಡಿಸಲು ರಸ್ತೆಗಳನ್ನು ಅಗೆದಿದ್ದು, ಗುಂಡಿಗಳಿಂದ ಕೂಡಿರುತ್ತದೆ ಹಾಗೂ ಸಾರ್ವಜನಿಕರ ಸಂಚಾರಕ್ಕೆ ತುಂಬ ತೊಂದರೆಯಾಗಿರುವುದಾಗಿ ಹಲವಾರು ದೂರುಗಳು ಬಂದಿರುವುದಾಗಿ ಮಾನ್ಯ ಸದಸ್ಯರು ತಿಳಿಸಿ, ಪೂಜ್ಯ ಮಹಾಪೌರರು, ಬಿ.ಬಿ.ಎಂ.ಪಿ ರವರಿಗೆ ಪತ್ರ ಬರೆದು ತಮ್ಮ ಅನುದಾನದಲ್ಲಿ ರೂ. 199.00 ಲಕ್ಷಗಳ ಅನುದಾನವನ್ನು ಬಿಡುಗಡೆ ಮಾಡಲು ಉಲ್ಲೇಖ (1)ರ ಪತ್ರದಲ್ಲಿ ಕೋರಿರುತ್ತಾರೆ. ಆದ್ದರಿಂದ ಸದರಿ ರಸ್ತೆಗಳನ್ನು ಅಭಿವೃದ್ಧಿ ಪಡಿಸಲು ಉಲ್ಲೇಖ(2)ರಲ್ಲಿ 2012-13ನೇ ಸಾಲಿನ ಅಯವ್ಯಯ 01-ಕೌನ್ಸಿಲ್ ಸಾಮಾನ್ಯ ವೆಚ್ಚಗಳು - ಮಹಾಪೌರರು ಅಜ್ಞೆ ಮಾಡಿದ ಕಾಮಗಾರಿಗಳು ಪಿ0190 ಶೀರ್ಷಿಕೆ ಅಡಿಯಲ್ಲಿ ರೂ. 199.00 ಲಕ್ಷಗಳ ಅನುದಾನವನ್ನು ಅನುದಾನ ಬಿಡುಗಡೆ ಮಾಡಲಾಗಿದ್ದು, ಕಾಮಗಾರಿಯನ್ನು ನಿರ್ವಹಿಸಲು ಈ ಕೆಳಕಂಡ ಅಂಶಗಳನ್ನು ಅಳವಡಿಸಿಕೊಂಡು ಅಂದಾಜನ್ನು ತಯಾರಿಸಿ ಸಲ್ಲಿಸಲಾಗಿದೆ.

1. ತಗ್ಗು ಪ್ರದೇಶದಲ್ಲಿನ ರಸ್ತೆಗಳನ್ನು ಗುಣಮಟ್ಟದ ವೆಟ್ ಮಿಕ್ಸ್ ಅಳವಡಿಸುವುದು.

2. ರಸ್ತೆಯ 25 ಎಂ.ಎಂ ದಪ್ಪದ ಎಸ್.ಡಿ.ಬಿ.ಸಿ ಯಿಂದ ಡಾಂಬರ್ ಮಾಡುವುದು ಹಾಗೂ ಇತರೆ ಅವಶ್ಯಕ ಅಂಶಗಳಿಗೆ ಅಂದಾಜಿನಲ್ಲಿ ಅವಕಾಶ ಕಲ್ಪಿಸಿಕೊಂಡಿರುತ್ತದೆ.

ಸದರಿ ಅಂದಾಜು ಪಟ್ಟಿಗಳನ್ನು 2012-13ನೇ ಸಾಲಿನ ಲೋಕೋಪಯೋಗಿ ಇಲಾಖೆ ದರಪಟ್ಟಿಯನ್ನು ಅಳವಡಿಸಿಕೊಂಡು ರೂ. 50.00 ಲಕ್ಷಗಳಿಗೆ ತಯಾರಿಸಲಾಗಿದೆ.



ಸಹಾಯಕ ಅಭಿಯಂತರರು

ವಾರ್ಡ್ ನಂ. 8


ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
ಕೊಡಿಗೆಹಳ್ಳಿ ಉಪವಿಭಾಗ
Assistant Executive Engineer,
Kodigehalli Sub Division,
Yelahanka Zone, B.B.M.P.,
Bangalore.

BRUHAT BANGALORE MAHANAGARA PALIKE
YELAHANKA ZONE

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Estimate Cost : Rs. 50.00 Lakhs

Sl no	Description of item	Unit	No.	L	B/W	D/T/H	Qty.	Rate	Amount
1	KSRRB 300-1. Earthwork excavation by manual means in Hard soil involving an average horizontal throw upto 2 meters and an average lift upto 0.5 m, excavated surface leveled and sides neatly dressed, the disposed earth to be leveled neatly after breaking of clods complete as per specifications complete as per specifications. MORTH Chapter 3 (Page no 149, Item no. 19.2 of BCSR 2012-13)	Cum							
	Devinagara Cross road		2	155.00	0.45	0.35	48.83		
			2	145.00	0.45	0.35	45.68		
			2	100.00	0.45	0.35	31.50		
			2	135.00	0.45	0.30	36.45		
			2	125.00	0.45	0.30	33.75		
			2	120.00	0.45	0.30	32.40		
			2	105.00	0.45	0.30	28.35		
			2	100.00	0.45	0.30	27.00		
	CP layout 3rd Cross		2	172.00	0.45	0.30	46.44		
	Muneshwara Block Cross Roads		2	105.00	0.45	0.35	33.08		
			2	90.00	0.45	0.30	24.30		
							387.77	81.00	31408.97
	Basic Rate	75.00							
	Area Weightage @ 8%	6.00							
	Total	81.00							
2	Removing B.S. slab of Drain and stacking. (Page no 28, Item no. 5.32 of BCSR 2012-13)	Sqm							
	Devinagara Cross road		2	155.00		1.35	418.50		
			2	145.00		1.35	391.50		
			2	100.00		1.35	270.00		
			2	135.00		1.35	364.50		
			2	125.00		1.35	337.50		
			2	120.00		1.35	324.00		
			2	105.00		1.35	283.50		
			2	100.00		1.35	270.00		
	CP layout 3rd Cross		2	172.00		1.35	464.40		
	Muneshwara Block Cross Roads		2	105.00		1.35	283.50		
			2	90.00		1.35	243.00		
							3650.40	44.47	162349.35
	Basic Rate	41.18							
	Area Weightage @ 8%	3.29							
	Total	44.47							
3	Refixing stone slabs of drains and pointing in C.M (1:3) (Page no 28, Item no. 5.33 of BCSR 2012-13)	Sqm							
	Drain		Considering 80% of Qty vide Item no 2						
							2920.32	63.00	183969.65
	Basic Rate	58.33							
	Area Weightage @ 8%	4.67							
	Total	63.00							

4	KSRRB 300-3 Earthwork excavation and forming in embankment by manual means in Hard Soil with initial lead upto 15 m. and lift of 1.5m. (When earth is taken from bank cutting or from borrow pits) including breaking of clods, spreading to required line and level, forming, and cost of all labour complete as per specifications. (excluding watering and compaction of earth) MORTH Chapter 3 (Page no 149, Item no. 19.4 of BCSR 2012-13)	Cum							
	Devinagara Cross road		1	155.00	5.00	0.25	193.75		
			1	145.00	5.00	0.25	181.25		
			1	135.00	5.00	0.25	168.75		
			1	125.00	5.00	0.25	156.25		
			1	120.00	5.00	0.25	150.00		
			1	105.00	5.00	0.25	131.25		
			1	100.00	5.00	0.25	125.00		
	CP layout 3rd Cross		1	172.00	5.50	0.25	236.50		
	Muneshwara Block Cross Roads		1	105.00	5.00	0.25	131.25		
			1	90.00	5.00	0.25	112.50		
							1586.50	112.32	178195.68
	Basic Rate	104.00							
	Area Weightage @ 8%	8.32							
	Total	112.32							
5	Dismantling Cement concrete flooring or plain cement concrete work including removing and conveying the debries to distance up to 200 m (Avg 15 cms Tk) (Page no 28, Item no.37.51 of BCSR 2012-13)	Sqm							
			15.00	5.00	1.50		112.50		
	Basic Rate	36.00					112.50	38.88	4374.00
	Area Weightage @ 8%	2.88							
	Total	38.88							
6	Providing granite slabs of selected quality roughly dressed and fixed in cement mortar (1:6) including fixing curing etc., complete. (Page no 28, Item no. 5.31.1 of BCSR 2011-12)	Sqm							
	7.5 cms thick						730.08		
							730.08	315.36	230238.03
	Basic Rate	292.00							
	Area Weightage @ 8%	23.36							
	Total	315.36							
7	KSRB 4-1.3: Providing and laying in position plain cement concrete of mix M7.5 with OPC cement @ 180kgs, with 40mm and down size graded granite metal coarse aggregates @ 0.85 cum and fine aggretes @ 0.57 cum machine mixed machine mixed concrete laid in layers not exceeding 15cms thick well compacted in foundation and plinth including cost of all materials labour HOM of machinery curing complete as per	Cum							
	For Culvert		5	6.50	1.35	0.20	8.78		
	Kodigehalli village		1	100.00	3.50	0.15	52.50		
	Basic Rate	3597.00					61.28	3884.76	238038.669
	Area Weightage @ 8%	287.76							
	Total	3884.76							

8	KSRB 4.2.2 : Providing and laying in position reinforced cement concrete of design mix M20 with OPC cement @ 20kgs, with 20mm and down size graded granite metal, coarse aggregates @ 0.878cum and fine aggregates @ 0.459cum with superplasticiser @ 3 lts conforming to IS 9103-1999 Reaffirmed-2008 machine mixed concrete laid in layers not exceeding 15cms thick vibrated for all works in foundation plinth and ground floor level for roof slabs, staircase, lintels, retaining walls, return walls, walls (any thickness) including attached pilasters, columns, piers, abutments, pillars, posts, struts, buttresses, string or lacing courses, parapets coping, bed blocks, anchor blocks, plain window cills, fillets etc., including cost of all materials, labour, HOM							
	For Culvert		5x2	6.50	0.75	0.30	14.63	
			5	6.50	1.00	0.30	9.75	
			5	6.50	1.20	0.23	8.97	
			1	100.00	3.50	0.10	35.00	
							68.35	5239.08
								358064.92
	Basic Rate	4851.00						
	Area Weightage @ 8%	388.08						
	Total	5239.08						
9	KSRB 4-6.4 : Providing and removing centering, shuttering, strutting, propping etc., and removal of form work for vertical surface such as walls at any thickness, including attached pilasters, buttresses, plinth and string courses cost of all materials, labour complete as per	Sqm						
	For Culvert		5x4	6.50	1.00		130.00	
			5	6.50	1.00		32.50	
							162.50	244.08
								39663.00
	Basic Rate	226.00						
	Area Weightage @ 8%	18.08						
	Total	244.08						
10	KSRB 4.9.2 : Providing T.M.T. Steel reinforcement for R.C.C. work including straightening, cutting, bending, hooking , placing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per design (laps and wastage shall not be measured and paid) cost of materials, labour, HOM of machinery complete as per specifications. Specification No. KBS 4.6.3. (Page No. 19& Item No. 4.46)	Qtl						
	100 kg/cum		Qty. Vide Item No. 3				34.00	7323.48
	Basic Rate	6781.00						
	Area Weightage @ 8%	542.48						
	Total	7323.48						
12	KSRB M400-17 Providing, laying, spreading and compacting graded stones aggregate to wet mix macadam specifications including pre mixing the material with water at OMC in mechanical mix plant carriage of mixed method of tipper to site, laying in uniform layers with paver in sub-base/base course on well prepared surface and compacting with vibratory roller to achieve the desired density complete as per specifications.MORTH Specification No 406 (Page no 166, Item no. 20.18 of BCSR 2012-13)	Cum						
	Devinagara Cross road		1	155.00	5.00	0.20	155.00	

		1	145.00	5.00	0.20	145.00		
		1	135.00	5.00	0.20	135.00		
		1	125.00	5.00	0.20	125.00		
		1	120.00	5.00	0.20	120.00		
		1	105.00	5.00	0.20	105.00		
		1	100.00	5.00	0.20	100.00		
	CP layout 3rd Cross	1	172.00	5.50	0.20	189.20		
	Muneshwara Block Cross Roads	1	105.00	5.00	0.20	105.00		
		1	90.00	5.00	0.20	90.00		
						1269.20	1059.48	1344692.02
	Basic Rate	981.00						
	Area Weightage @ 8%	78.48						
	Total	1059.48						
13	KSRRB M500-6. Providing and applying primer coat with bitumen emulsion on prepared surface of granular base including clearing of road surface and spraying primer at the rate of 0.60 kg / sqm using mechanical means complete as per specifications MORTH Specification No. 502 (Page no 171, Item no. 21.6 of BCSR 2012-13)	Sqm						
	Devinagara Cross road	1	155.00	5.00		775.00		
		1	145.00	5.00		725.00		
		1	135.00	5.00		675.00		
		1	125.00	5.00		625.00		
		1	120.00	5.00		600.00		
		1	105.00	5.00		525.00		
		1	100.00	5.00		500.00		
	CP layout 3rd Cross	1	172.00	5.50		946.00		
	Muneshwara Block Cross Roads	1	105.00	5.00		525.00		
		1	90.00	5.00		450.00		
						6346.00	39.64	251530.06
	Basic Rate	36.70						
	Area Weightage @ 8%	2.94						
	Total	39.64						
14	KSRRB M500-18. Providing and laying semi dense bituminous concrete 25 mm thick with 100-120 TPH batch type HMP producing an average output of 75 tonnes per hour using crushed aggregates of specified grading, premixed with bituminous binder at 5% of mix and filler, transporting the hot mix to work site, laying with a hydrostatic paver finisher with sensor control to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MORTH specification clause No. 500.8 complete in all respects as per specifications 25-30 mm compacted thickness with 5% bitumen 80/100 (Grading II) (Page no 174, Item no. 21.20 1 of BCSR 2012-13)	Cum						
	Devinagara Cross road	1	155.00	5.00	0.025	19.53		
		1	145.00	5.00	0.025	18.27		
		1	135.00	5.00	0.025	17.01		
		1	125.00	5.00	0.025	15.75		
		1	120.00	5.00	0.025	15.12		
		1	105.00	5.00	0.025	13.23		
		1	100.00	5.00	0.025	12.60		
	CP layout 3rd Cross	1	172.00	5.50	0.025	23.84		
	Muneshwara Block Cross Roads	1	105.00	5.00	0.025	13.23		
		1	90.00	5.00	0.025	11.34		
						159.92	8829.00	1411926.62

	Basic Rate	8175.00						
	Area Weightage @ 8%	654.00						
	Total	8829.00						
15	KSRRB M800-13.Road Marking with Hot Applied Thermoplastic Compound with Reflectrising Glass Beads on Bituminous Surface:- Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC 35. The finished surface to be level, uniform and free from streaks and holes complete as per specifications MORTH Specification No. 803 (Page no 193, Item no. 24.15 of BCSR 2012-13)		Sqm					
	Devinagara Cross road		2.00	155.00		0.10	31.00	
			2.00	145.00		0.10	29.00	
			2.00	135.00		0.10	27.00	
			2.00	125.00		0.10	25.00	
			2.00	120.00		0.10	24.00	
			2.00	105.00		0.10	21.00	
			2.00	100.00		0.10	20.00	
	CP layout 3rd Cross		2.00	172.00		0.10	34.40	
	Muneshwara Block Cross Roads		2.00	105.00		0.10	21.00	
			2.00	90.00		0.10	18.00	
						250.40	429.84	107631.94
	Basic Rate	398.00						
	Area Weightage @ 8%	31.84						
	Total	429.84						
16	KSRRB M800-35 Providing and fixing of road stud 100x 100 mm, die- cast in aluminium, resistant to corrosive effect of salt and grit, fitted with lense reflectors, installed in concrete or asphaltic surface by drilling hole 30 mm upto a depth of 60 mm and bedded in a suitable bituminous grout or epoxy mortar, all as per BS: 873 part 4:1973 complete as per specifications (Page no 197, Item no. 24.41 of BCSR 2012-13)		Nos					
						50.00	429.84	21492.00
	Basic Rate	268.00						
	Area Weightage @ 8%	21.44						
	Total	289.44						
17	Providing and fixing of retro- reflectorised cautionary, mandatory and informatory sign as per IRC 67 made of high intensity grade sheeting vide clause 800.1.3, fixed over Aluminium sheeting, 1.5 mm thick supported on a mild steel angle iron post 75 mm x 75 mm x 6 mm firmly fixed to the ground by means of properly designed foundation with M15 grade cement concrete 45 cm x 45 cm x 60 cm, 60 cm below ground level as per approved drawing complete as per specifications		Nos					
	60 x 60 cm square					12.00	3205.44	38465.28
	Basic Rate	2968.00						
	Area Weightage @ 8%	237.44						
	Total	3205.44						

18	KSRRB M100-1 Loading and Unloading of Stone Boulder / Stone aggregates /Sand/ Kanker / Moorum. KSRRB M100-1 : Placing tipper at loading point, loading with front end loader, dumping, turning for return trip, excluding time for haulage and return trip complete as per specifications. MORTH Chapter 1 (Page no 197, Item no. 24.41 of BCSR 2012-13)	Cum							
		Qty vide item no 1 & 4				1974.27	72.71	143540.12	
Basic Rate		62.20							
for 2 Km 1.28x2x2		5.12							
		67.32							
Area Weightage @ 8%		5.39							
Total		72.71							
19	Miscellaneous & Unforeseen Charges							5421.39	
TOTAL								5000000.00	

(Rupees Fifty Lakhs Only)
CERTIFICATE

- 1 Certified that I have personally inspected the area and prepared the estimate.
- 2 Certified that the work proposed in this estimate is not including in any other scheme.
- 3 Certified that the estimate is prepared as per 2012-13 SR of PWD.
- 4 This works is not split up.

[Signature]
Assistant Engineer

[Signature]
Assistant Executive Engineer,
Bruhat Bangalore Mahanagara Palike
Kodigehalli Sub Division,
Yelahanka Zone, B.D.M.P.,
Bangalore.

[Signature]
Executive Engineer
Bruhat Bangalore Mahanagara Palike
Byatarayanapura Division,
ಬಿ.ಬಿ.ಎಂ.ಪಿ.ಕೆ. ಯಾತರಾಯನುಪುರಾ ವಿಭಾಗ,
ಸುಬರಹಳ್ಳಿ, ಬೆಂಗಳೂರು-೫೨.

ADMINISTRATIVELY SANCTIONED FOR Rs. 50.00 lakh
Rupees Fifty lakhs only

Under _____

Registered as EE () No. 9/9/9
Subject to conditions contained in
enclosed memo EE () No. 19/...

Dt. JECD A/A Estimate A/Sanctioned
No. 983

dated 6-2-2013 Rs. 50.00 lakh

[Signature]
Joint Commissioner
(Yelahanka Zone)
BBMP, Bengaluru-92.

Sanction for Rs. 50.00 lakh
(Fifty lakh only)
2012-13 works grant
P0190
109/12-17 Subject
to conditions contained enclosed memo.
No. 109/12-17 Dr. 2-12
[Signature]
Superintending Engineer
Yelahanka Zone
BBMP, Bengaluru-92

AE/JE